

HEALTH OF CHICKENS IN COLD WEATHER



Open-Front Chicken House for an Exposed Lot.

Grit, charcoal and green food in addition to the regular grains, will be found necessary to keep the flock in the best condition. The best poultry breeders know that the fowl on free range will probably obtain plenty of grit but they keep it before the birds at all times as it is not expensive and they wish to be sure that every hen receives the proper amount to keep her strong and well.

Clean out the poultry house at least once each week. We have found, says a writer in an exchange, that scattering a few shovelfuls of garden soil under the roosts is a first-class method of saving the manure. The dropping boards are then easy to clean and the soil, according to experiment station reports, will fix the nitrogen in the manure and make it more valuable for spreading back on the garden. A frequent cleaning of the house results in a healthier flock as birds cannot prosper and roost in an atmosphere saturated with devitalizing gases.

The hay chaff from the barn floor should be dumped into the poultry house. The hens will like it and if you dump a few bushels on the poultry house floor in the evening you will find them scratching and singing the next morning and working up the kind of appetite which means a good feeder and a good producer.

Plan to improve your poultry plant whenever possible and you will note

a general improvement in the health and appearance of your fowls. The improvements may consist of larger ranges, cleaner houses, stronger and more vigorous males, plenty of dusting places, and sufficient shade. All of these improvements will make you a real poultry farmer and the health of your flock will in direct proportion increase your receipts from both eggs and stock.

To keep fowls healthy never feed them so-called egg foods which are only patent condiments suitable to inflame the organs and reduce the real value of the bird. Some of them may seem to stimulate the hens for a while but the stimulation is unnatural and of very temporary value. Pepper is not good for poultry and also may inflame the organs. The poultry breeders who are successful stick to the balanced rations of good substantial foodstuffs and do not experiment with "patent medicines."

The open-front poultry house seems like the most practical method of housing poultry that has been devised. It insures a plentiful supply of fresh air for the birds and prevents drafts. I have never seen an open-front house that seemed damp if it was properly cleaned and the houses with glass windows nearly always seem damp and close. The open-front house costs less money and is the only sure way of keeping the flock in good condition.

SOME GOOD POULTRY ADVICE

Exercise Afforded Hens in Scratching Through Chaff Will Stimulate Egg Production.

The chaff that accumulates in the barn loft makes excellent scratch material for the hens. The hens will find much to eat in this rubbish, and the exercise they get in scratching through it will stimulate egg production.

A hen that has recovered from a serious disease, such as roup, should be marked in order to be certain that she does not get in the breeding pens. A hen that has had roup will likely be deficient in vitality.

A good and cheap method of supplying grit is to dump a load or two of gravel in the poultry yard.

The egg-eating habit may result through careless feeding of egg-shells. Before feeding the shells should be pulverized. A good method is to brown the half shells in an oven, when they pulverize easily.

A good method of feeding cabbage is to suspend the heads to the roof with string, thus compelling the hens to jump for every bite they get.

Turnips, pumpkins, small potatoes and parings are greatly relished by the hens when cooked, mixed with the mash and fed steaming hot.

The perches should be on a level. When built one above another—step fashion—the hens will fight for the higher perches. Cedar wood makes good perches. Lice and mites do not like the odor of cedar.

In feeding milk to poultry it should be fed either always sweet or always sour. Changing from one to the other will result in digestive troubles.

If the dropping boards are not cleaned go through the houses each morning and sprinkle dry loam or sifted coal ashes over the dropping voided during the night. This will not only keep down odors, but will prevent the valuable portion of the manure—ammonia—from escaping through evaporation.

Cut clover and cut alfalfa are excellent substitutes for green food. These foods are rich in protein and the mineral matter necessary for the formation of bone and egg shell. One hundred pounds of clover contains sufficient lime to form the shells for seventeen dozen eggs.

Sitters and Non-Sitters.

What did people do who kept the non-sitting breeds before incubators were invented? Well, the majority kept two breeds, sitters and non-sitters, and kept them separated, or kept the old hens of the non-sitting breeds. These will brood at times.

Foolish Changes of Breeds.

Stick to one breed. It is only folly to be changing breeds continually in grading—only an incongruous mixture can result from such practice. When you start to grade up to one breed stick to it and use the best stock you can find of that breed.

DIE IN MYSTERIOUS MANNER

Many Reasons Assigned for Mortality Among Poultry Flocks Other Than That of Disease.

So often chickens die in a mysterious manner, both the young and old flocks—some members of each at least. The owner is puzzled and looks about for a name of this strange disease, often seeking advice abroad. Perhaps he gets an answer that might fit the symptoms, perhaps he does not, and wonders why his fowls died after all of his caution and care.

Chickens die of many things and for many reasons other than disease. Young chickens especially will eat many things the old ones may not touch. For instance, young chickens will eat toadstools, and these grow thick and fast in manure piles and other places where chickens dig. Toadstools will kill, finally. The chicks act sick, lose flesh rapidly, mope about, get dizzy when trying to walk, then die.

Unless you have definite symptoms of certain diseases, always look about first for the reason of sickness in fowls from something they have eaten.

RIGHT CARE DURING WINTER

Important to Have Poultry Houses Well Ventilated, So as to Furnish Fresh, Pure Air.

Most poultry disease are contagious, and after they once get firmly established are hard to break and successfully eradicate. Most of these diseases occur during the winter and early spring, when the fowls are confined and cannot get out and run where they please, on account of rainy and cold weather.

It is important that their houses be well ventilated, so as to furnish fresh, pure air at all times; for if they are compelled to breathe impure air which arises from the filth of the henhouse, which is bound to accumulate, they will be apt to contract some disagreeable disease which may prove costly before cured.

DESTROY ALL INSECT PESTS

Renew All Nests and Dust Pullets and Hens With Powder to Effectually Eradicate Vermin.

(By A. C. SMITH, Poultryman, University Farm, St. Paul, Minn.)
Renew the nests with straw or excelsior, and dust the pullets and hens thoroughly with insect powder. Repeat this application in a week or ten days, for the nests especially.

This should effectually destroy all body lice and these pests should not bother the birds for some time, especially if in addition to the dust bath a handful of sulphur or insect powder is put into each nest.

Fatten Poultry for Market.

It never pays to send to market thin, poor poultry. Always fatten it up with plenty of good corn.

BRITISH LINER SUNK SECOND STOCK CITY

NEARLY 300 LOSE LIFE WHEN TORPEDO HITS PERSIA.

U. S. CONSUL REPORTED LOST

New Complications Between America and Austria Is Feared in Washington Official Circles.

London.—The British liner Persia was sunk December 31st and most of the passengers and crew were lost, which is thought will number about 300. The vessel was approaching Alexandria when it was hit by a torpedo.

Robert McNeely, American consul at Aden, was a passenger on the Persia, and is believed to have been drowned.

The Peninsular and Oriental Steamship company stated officially that the Persia had left London, December 18, and Marseilles, December 26, carrying the British mails bound for Bombay and that it was sunk off the island of Crete.

Sixty-one first-class and eighty-three second cabin passengers, including eight children, boarded the steamship Persia at London, according to information obtained at the Peninsular and Oriental line. At Marseilles thirty-five of the first class and thirty-two of the second cabin boarded the boat.

The company estimated that after deducting the number of passengers leaving the ship at its various ports of call about 160 passengers were aboard when the vessel was sunk.

A dispatch from Cairo says that two boatloads of people were drawn down with the steamer when she sank, as there was no time to cut the ropes. Four boats were lowered, but it was thirty hours before a trawler picked them up after they left the scene of the accident. Several ships passed by without assisting the refugees, being afraid, presumably of decoys. Many passengers were thrown into the water when the vessel heeled over.

The scene of the catastrophe, the seas between the island of Crete and Alexandria, recently has been the graveyard of a number of fine ships, and only a few weeks ago the American tank steamer Petrolite narrowly escaped the guns of a submarine there.

The Persia was the first passenger ship lost by the Peninsular and Oriental line during the war. The vessel was of 8,000 tons displacement, and carried a crew of nearly 300.

Reports No Warning Given.

Washington, D. C.—Anxiety over the sinking of the British steamship Persia increased in official circles here when a consular dispatch brought the information that the ship had been torpedoed without warning and that at least one American citizen, Robert N. McNeely, new consul at Aden, Arabia, was missing.

Although the nationality of the submarine which sank the Persia has not been established, it is generally assumed in Washington to have been an Austrian, since the German ambassador Count von Bernstorff, declared recently that no German or Turkish submarines were operating in the Mediterranean.

Ford Blames War on People.

New York.—Henry Ford, who led the peace expedition which left here December 4 on the steamship, Oscar II, for Copenhagen, in the hope of bringing about a conference of neutral nations that would end the war, arrived here on the steamer Bergensfjord. He confirmed cable reports that his return had been hastened by illness, but said it made a difference of only a few days, as he intended when he left to come back this month.

Mr. Ford declared his views regarding the cause of the war have undergone a marked change. When he left, he said, he was of the opinion that bankers, manufacturers of munitions and armament were responsible, but he returns with the belief that it is the people themselves, those now being slaughtered, who are responsible.

Report Many Vessels Sunk.

Vienna.—Austro-Hungarian and German submarines sank in the Mediterranean eight troop ships, twenty-five transports and thirty-four merchantmen, with a total tonnage of about 225,325, in the last two weeks of October and the month of November, according to claims made in authoritative quarters here. The loss of life is said to have been very heavy in the case of troop ships and the estimate is made that it amounts to at least 5,000 men.

Congress to Consider Conscription.
London.—A special trades congress to which all societies affiliated with the labor movement are invited to send representatives, will be convened in London early in January to consider the government's bill for the compulsory enlistment.

Case of Leprosy in Chicago.

Chicago.—A case of leprosy was discovered in the county jail here recently, the victim being R. V. Mitchell, accused of larceny. He said he believed he got disease in Philippines.

OMAHA NEXT TO CHICAGO AS HOG AND SHEEP MARKET.

RAIL EXPERT GIVES FIGURES

1,203,307 Cattle, an Increase of Over 75,000 Over 1914, Received During Past Twelve Months.

Lincoln.—Greater Omaha is the second greatest stock market in the United States—which means also in the world—according to a detailed study, the results of which were prepared by Rate Expert U. G. Powell of the Nebraska railway commission.

Of the seven leading markets of the country Chicago leads them all in cattle, hog and sheep receipts. Omaha is third in cattle receipts, and second in hog and sheep receipts.

Kansas City trails along third with the second prize in cattle receipts and third prize in both the hog and sheep columns.

During 1915 cattle receipts on the Omaha market were 1,203,307, against 936,694 in 1914. Hog receipts for the year were 2,545,210; sheep 3,214,585.

The increase in cattle for Omaha was 276,613 head; of hogs, 277,826, and of sheep, 67,151. Kansas City made a small increase in cattle and hogs, but a decrease in sheep. Chicago was the same way, but St. Louis had a decrease in all three lines. Sioux City had a decrease in sheep, Denver a decrease in cattle and St. Joseph a decrease in hogs.

To Talk of Defense.

The ninth annual debate of the Nebraska High School Debating league, which began in February and end with the state competition at the University of Nebraska on High School Day in May will be on the live question of increased armament. The proposition is: "Resolved, That congress should substantially adopt the recommendations of the secretary of war and the navy for increased armament." This question will be threshed out in some ninety schools in all parts of the state under the auspices of the largest debating league in the country. League was organized with thirty members in 1908. In each district the members are paired for the first-series debates, the winners then go into the second-series; and the two winners there then meet to decide the district championship—which school shall have the honor of sending a representative to the state debate.

The board will accept the resignation and gave out that the discrepancies at the institution will all be made good by companies having the contracts.

One Hat Factory Reported.

The federal census of 1910 lists Nebraska as the twenty-ninth state in the union as to population, with an estimated population for 1914 of 1,245,873, yet one hat factory makes all the "Nebraska-made" hats worn by Nebraskans. The total capital invested in this Nebraska hat factory is \$20,000. Sixteen people are employed, five of whom are females. Total value of stock used, \$30,000. Value of production, \$55,000. Total paid to wage earners for the year 1915 is a little over \$11,400.

To Observe Child Labor Day.

January 24 will be observed as Child Labor day throughout the country and while State Superintendent Thomas does not believe a whole day should be devoted to the observance of the same, because Nebraska has so many special days, he thinks a short time should be spent in each school and recommends a program offered by the national child day committee as proper to use.

Outlawed Claim Received.

A wolf bounty claim of the vintage of 1891 was received by the state auditor a few days ago. The claim was sent in by J. E. Enders of Brown county and was for nine scalps. The state ceased paying bounties several years ago and therefore the claim is outlawed.

Inspection of Cattle.

According to a report prepared by Mr. Sleeth of the state veterinarian's office, 4,578 cattle have been inspected during the time from April 1 to December 15, and 74-10 per cent have shown signs of tuberculosis, the exact number being 329.

Jackson for Treasurer.

Friends of George Jackson, speaker of the last house of representatives of the Nebraska legislature, are out for the Nuckolls county statesman for the democratic nomination for state treasurer.

Asks Name Be Withdrawn.

Senator George W. Norris has asked Secretary of State Pool to see that his name does not go on the ballot next April as a republican candidate for president.

Agricultural Course Starts Soon.

The regular six weeks' winter course of the University School of Agriculture at Lincoln will begin January 4. The course includes a study of gasoline engines, farm machinery, animal diseases, marketing accounts, field crops, soils, poultry, fruits, vegetables, dairying and stock judging.

IMPROVED METHODS OF STOCK FEEDING



Excellent Beef Specimens.

(By D. B. GREEN, Ohio.)
The man who had the forethought to provide plenty of good carrots and mangies, is exceedingly well fixed for bringing the farm animals through the winter in good condition.

A good many dairymen are feeding skim milk to their cows. The animals seem to relish it; and, as it is not a fattening food, it does them no harm.

Whether or not it pays to grind corn for fattening pigs depends upon the price of the corn and the facilities and cost of grinding, which vary with the seasons and the conditions on the farms.

If skim milk is added to the ration fed to young chickens it will increase the consumption of other foods given.

Feed which has been allowed to get wet will ferment or sour readily and cause intestinal disorders. Don't feed it to your stock.

During the years when corn brought a very low price, cattle feeding could be conducted on very loose principles and still pay fair profits, but conditions have since changed and methods must be varied to meet the new conditions in beef production. We are forced to adopt more economical methods of production.

Our whole system of cattle feeding has been largely built up upon cheap grain foods and we have been making but little use of forage and hay in the production of our beef. Feeders must introduce better methods of producing their beef and not go out of business for the reason that grain foods are high.

Pork production returns to the soil the grain food elements that are consumed by the hogs, but cattle and sheep feeding make possible the use of clover, alfalfa and corn fodder and return them to the soil in a manner that will encourage the growth of



Junior Champion Angus Bull.

more clover, alfalfa and grain in the crop rotation and thus preserve the fertility of the soil.

The men who are most interested are the ones who raise their own feeders and make a practice of taking the very best of care of their animals. No man can go out and buy the class of young feeders that are demanded in the production of baby beef.

The advocate of baby beef has as his chief argument that young and growing animals make cheaper gains than older ones, or that the cost of a pound of grain increases with the age of the animal. This law is well established, and is primarily due to the fact that growth and lean meat requires less food for its production than does fat, for lean meat is a watery tissue compared with fat and is a less concentrated product. Fat is the most concentrated animal product we have.

For generations English farmers have made extensive use of dwarf Essex rape as a chick food. This plant may be described as a rutabaga run to head. The seed is sown like rutabaga turnip and cultivated, without thinning.

Experiments at the Kansas and Indiana stations show that the continued feeding of moldy corn to horses, causes nervous and intestinal troubles of a serious nature.

A ration consisting of two-thirds corn and one-third bean-meal may be fed to dairy cows with good results.

A feed of roots, especially carrots, is greatly relished by the colt, if when they are cut up, a little oil meal is scattered over them.

Good protein hay from clover or

cowpeas, combined with some nice corn stover (stover is simply the stalk without the ear, and may be used whole or shredded) will make a satisfactory roughage for feeding young heifers.

A limited amount of silage may be fed with satisfaction to sheep—say about ten pounds per head each day. But it should be fed in connection with some dry roughage, such as clover or alfalfa hay, or even mixed hay and straw.

In very cold weather, the sheep should have plenty of clover hay or corn fodder or such other roughness as is available on the farm. The ewes should be kept in a good, thrifty condition in order that the offspring may be healthy and vigorous.

DISEASES OF HOGS CAN BE PREVENTED

Serum and Sanitation Make Best Preparation for Warfare Against Hog Cholera.

Keep hogs thriving; strong, healthy hogs resist cholera.

Quarantine every hog, dead from cholera; the law requires it.

Lice, worms, and insanitary conditions weaken hogs and invite cholera. Disinfect hog yards occasionally with unslaked lime; it's good cholera insurance.

Serum and sanitation make the best preparation for the warfare against hog cholera.

Keep cholera hogs and carcasses away from the stream and insist that your neighbor do the same.

The straw shed for hogs is almost sure to be either damp or dusty. Either condition invites disease.

Keep gunny sacks saturated with crude oil where hogs can rub against them. Raise more hogs and fewer lice.

Kill lice with crude oil or fuel oil sprinkled on the hogs at feeding time, applied to rubbing posts or used as a two-inch layer on top of the water in a dipping tank.

Coughs and pneumonia from dusty beds may incidentally be prevented if louse-infested beds are oiled. Breathing dust may cause death from pneumonia and certainly renders hogs less resistant to cholera.

The Missouri agricultural experiment station has carefully tested each of these remedies and so have thousands of good farmers. They have stood the test but are not substitutes for serum treatment, for they resist but do not entirely prevent cholera. These thrift-producing measures would pay if cholera did not exist.

Sprinkle freshly slaked lime about one-sixteenth of an inch deep over the lots, sprinkling quarters once every month or two. At this rate, a barrel will kill the germs on about 1,280 square feet of lot space. Combat worms by feeding a mixture of 4 parts of charcoal, 3 parts of copperas, 3 parts of common salt, 3 parts of Glauber salts, 3 parts sal soda, 1 part sulphur. Mix in hundred-pound lots and keep in a dry place where the hogs can help themselves. It is a good "conditioner" and has been thoroughly tested at the Missouri agricultural experiment station and on many farms.

Avoid Digestive Disorders.

The careful herdsman avoids digestive disorders in the calf by feeding the skim milk warm and using only clean buckets. Overfeeding also helps to derange the digestive tract and should be avoided. From the time that the calf is born until it is well grown it should be provided with a clean stall. This prevents navel ill and insures a healthful growth.

Farm Brood Mares.

A few good brood mares on the ordinary farm if bred to a good stallion should produce several good colts every year besides doing the ordinary farm work. To secure the best results the brood mare that does the farm work must be given the best care and attention.

Cow Per Acre.

"A cow per acre," sounds pretty big; but it may work all right if you have the right kind of acres and the right sort of cows.